# SAFETY DATA SHEET

**Issue Date** 11-Feb-2015 **Revision Date** 23-Aug-2016 **Version** 2

## 1. IDENTIFICATION

**Product identifier**

**Product Name** Bostex 517

**Other means of identification**

**Product Code** BOSTEX 517
**UN/ID no.** UN3082
**Synonyms** Aqueous antioxidant dispersion

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Latex Additive.
**Uses advised against** None known

**Details of the supplier of the safety data sheet**

**Supplier Address**
Akron Dispersions, Inc.
3291 Sawmill Road
P.O. Box 4195
Akron, OH 44321

**Emergency telephone number**

**Company Phone Number** 330-666-0045
**Emergency Telephone** Chemtrec 1-800-424-9300 (Within USA and Canada), (+1) 703-741-5970 (Outside USA and Canada)

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label elements**

**Emergency Overview**

**Appearance** Aqueous solution **Physical state** Liquid **Odor** Ammoniacal

**Hazards not otherwise classified (HNOC)**
Not applicable

**Other Information**
May be harmful if swallowed

Unknown acute toxicity 0.66840375% of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

**Synonyms** Aqueous antioxidant dispersion.

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|---|---|---|---|
| 2,5-di-tert-pentylhydroquinone | 79-74-3 | 45 - 55 | * |
| Ammonium hydroxide | 1336-21-6 | 0 - 0.1 | * |
| Formaldehyde | 50-00-0 | 0 - 0.004 | * |
| Quinoline | 91-22-5 | 0 - 0.004 | * |
| Naphthalene | 91-20-3 | 0 - 0.0015 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Non-hazardous ingredients are proprietary and comprise the balance of the formulation.

## 4. FIRST AID MEASURES

**Description of first aid measures**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

**Inhalation** Remove to fresh air. If breathing is difficult seek medical attention.

**Ingestion** If on skin: Wash with plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** May cause irritation to skin and eyes.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical**

May cause irritation to skin and eyes.

**Hazardous combustion products** Oxides of carbon, nitrogen, sulfur and sodium.

**Explosion data**

**Sensitivity to Mechanical Impact** No data available.

**Sensitivity to Static Discharge** No data available.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** Sweep, vacuum or shovel into appropriate container.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Use personal protection recommended in Section 8.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a cool, dry area. Protect from freezing.

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Limits** .

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Formaldehyde<br>50-00-0 | Ceiling: 0.3 ppm | TWA: 0.75 ppm<br>(vacated) TWA: 3 ppm unless specified in 1910.1048<br>(vacated) STEL: 10 ppm 30 min unless specified in 1910.1048<br>(vacated) Ceiling: 5 ppm unless specified in 1910.1048<br>STEL: 2 ppm see 29 CFR 1910.1048 | IDLH: 20 ppm<br>Ceiling: 0.1 ppm 15 min<br>TWA: 0.016 ppm |
| Naphthalene<br>91-20-3 | TWA: 10 ppm<br>S* | TWA: 10 ppm<br>TWA: 50 mg/m$^3$<br>(vacated) TWA: 10 ppm<br>(vacated) TWA: 50 mg/m$^3$<br>(vacated) STEL: 15 ppm<br>(vacated) STEL: 75 mg/m$^3$ | IDLH: 250 ppm<br>TWA: 10 ppm<br>TWA: 50 mg/m$^3$<br>STEL: 15 ppm<br>STEL: 75 mg/m$^3$ |

**Appropriate engineering controls**

**Engineering Controls** Showers
Eyewash stations
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** In case of inadequate ventilation wear respiratory protection.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | | | |
|---|---|---|---|
| **Physical state** | Liquid | | |
| **Appearance** | Aqueous solution | **Odor** | Ammoniacal |
| **Color** | Cream to tan | **Odor threshold** | No information available |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **pH** | 9-11 | |
| **Melting point/freezing point** | 0 deg C | |
| **Boiling point / boiling range** | 100 deg C | |
| **Flash point** | No information available | |
| **Evaporation rate** | No information available | |
| **Flammability (solid, gas)** | No information available | |
| **Flammability Limit in Air** | | |
| **Upper flammability limit:** | No information available | |
| **Lower flammability limit:** | No information available | |
| **Vapor pressure** | No information available | |
| **Vapor density** | No information available | |
| **Relative density** | No information available | |
| **Water solubility** | Miscible in water | |
| **Solubility in other solvents** | No information available | |
| **Partition coefficient** | No information available | |
| **Autoignition temperature** | No information available | |
| **Decomposition temperature** | No information available | |
| **Kinematic viscosity** | No information available | |
| **Dynamic viscosity** | No information available | |
| **Explosive properties** | No information available | |
| **Oxidizing properties** | No information available | |

**Other Information**

| | |
|---|---|
| **Softening point** | No information available |
| **Molecular weight** | No information available |
| **VOC Content (%)** | No information available |
| **Density** | No information available |
| **Bulk density** | No information available |

## 10. STABILITY AND REACTIVITY

**Reactivity**
No data available

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**
None under normal processing.

**Conditions to avoid**
Extremes of temperature and direct sunlight.

**Incompatible materials**
Strong acids. Strong bases. Strong oxidizing agents.

**Hazardous Decomposition Products**
Oxides of carbon, nitrogen, sulfur and sodium.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information** No data available

**Inhalation** No data available.

**Eye contact** No data available.

**Skin contact** No data available.

**Ingestion** No data available.

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| 2,5-di-tert-pentylhydroquinone 79-74-3 | = 2 g/kg ( Rat ) | - | - |
| Ammonium hydroxide 1336-21-6 | = 350 mg/kg ( Rat ) | - | - |
| Formaldehyde 50-00-0 | = 100 mg/kg ( Rat ) | = 270 mg/kg ( Rabbit ) | = 0.578 mg/L ( Rat ) 4 h |
| Quinoline 91-22-5 | = 331 mg/kg ( Rat ) | = 540 µL/kg ( Rabbit ) | - |
| Naphthalene 91-20-3 | = 490 mg/kg ( Rat ) = 1110 mg/kg ( Rat ) | > 20 g/kg ( Rabbit ) = 1120 mg/kg ( Rabbit ) | > 340 mg/m$^3$ ( Rat ) 1 h |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.
**Germ cell mutagenicity** No information available.
**Carcinogenicity** No information available.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Formaldehyde 50-00-0 | A2 | Group 1 | Known | X |
| Naphthalene 91-20-3 | A3 | Group 2B | Reasonably Anticipated | X |

**Reproductive toxicity** No information available.
**STOT - single exposure** No information available.
**STOT - repeated exposure** No information available.
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**The following values are calculated based on chapter 3.1 of the GHS document** .
ATEmix (oral) 4,172.00 mg/kg

## 12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.

**Ecotoxicity**

50.12941 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---|---|---|---|
| Ammonium hydroxide 1336-21-6 | - | 8.2: 96 h Pimephales promelas mg/L LC50 | 0.66: 48 h Daphnia pulex mg/L EC50 0.66: 48 h water flea mg/L EC50 |
| Formaldehyde 50-00-0 | - | 0.032 - 0.226: 96 h Oncorhynchus mykiss mL/L LC50 flow-through 100 - 136: 96 h Oncorhynchus mykiss mg/L LC50 static 22.6 - 25.7: 96 h Pimephales promelas mg/L LC50 flow-through 23.2 - 29.7: 96 h Pimephales promelas mg/L LC50 static 1510: 96 h Lepomis macrochirus µg/L LC50 static 41: 96 h Brachydanio rerio mg/L LC50 static | 11.3 - 18: 48 h Daphnia magna mg/L EC50 Static 2: 48 h Daphnia magna mg/L LC50 |
| Quinoline 91-22-5 | 84: 72 h Desmodesmus subspicatus mg/L EC50 static 90: 96 h Desmodesmus subspicatus mg/L EC50 static 51: 4 h Pseudokirchneriella subcapitata mg/L EC50 | 40: 96 h Poecilia reticulata mg/L LC50 static 46: 96 h Pimephales promelas mg/L LC50 static 77.8: 96 h Pimephales promelas mg/L LC50 flow-through | 45.9 - 57.3: 48 h Daphnia magna mg/L EC50 Static 28.5: 48 h Daphnia magna mg/L EC50 |
| Naphthalene 91-20-3 | 0.4: 72 h Skeletonema costatum mg/L EC50 | 0.91 - 2.82: 96 h Oncorhynchus mykiss mg/L LC50 static 5.74 - 6.44: 96 h Pimephales promelas mg/L LC50 flow-through 1.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.99: 96 h Pimephales promelas mg/L LC50 static 31.0265: 96 h Lepomis macrochirus mg/L LC50 static | 1.09 - 3.4: 48 h Daphnia magna mg/L EC50 Static 1.96: 48 h Daphnia magna mg/L EC50 Flow through 2.16: 48 h Daphnia magna mg/L LC50 |

**Persistence and degradability**
No information available.

**Bioaccumulation**
No information available.

| Chemical Name | Partition coefficient |
|---|---|
| Formaldehyde 50-00-0 | 0.35 |
| Quinoline 91-22-5 | 1.88 - 2.06 |
| Naphthalene 91-20-3 | 3.3 |

**Other adverse effects** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes** Dispose of in accordance with federal, state and local regulations.

**Contaminated packaging** Do not reuse container.

| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---|---|---|---|---|
| Formaldehyde<br>50-00-0 | U122 | Included in waste streams: K009, K010, K038, K040, K156, K157 | - | U122 |
| Naphthalene<br>91-20-3 | U165 | Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145 | - | U165 |

| Chemical Name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|---|---|---|---|---|
| Naphthalene<br>91-20-3 | - | - | Toxic waste<br>waste number F025<br>Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. | - |

| Chemical Name | California Hazardous Waste Status |
|---|---|
| Ammonium hydroxide<br>1336-21-6 | Toxic<br>Corrosive |
| Formaldehyde<br>50-00-0 | Toxic<br>Ignitable |
| Naphthalene<br>91-20-3 | Toxic |

## 14. TRANSPORT INFORMATION

**DOT**

**UN/ID no.** UN3082
**Proper shipping name** Environmentally hazardous substances, liquid, n.o.s. (2,5-di-tert-pentylhydroquinone)
**Hazard Class** 9
**Packing Group** III
**Marine pollutant** This product contains a chemical which is listed as a marine pollutant according to DOT.

**IATA**

**UN/ID no.** UN3082
**Proper shipping name** Environmentally hazardous substances, liquid, n.o.s. (2,5-di-tert-pentylhydroquinone)
**Hazard Class** 9
**Packing Group** III

**IMDG**

**UN/ID no.** UN3082
**Proper shipping name** Environmentally hazardous substances, liquid, n.o.s. (2,5-di-tert-pentylhydroquinone)
**Hazard Class** 9
**Packing Group** III
**Marine pollutant** This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

## 15. REGULATORY INFORMATION

### International Inventories

**TSCA** Listed

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
**ENCS** - Japan Existing and New Chemical Substances
**IECSC** - China Inventory of Existing Chemical Substances
**KECL** - Korean Existing and Evaluated Chemical Substances
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain a toxic chemical in excess of 1% of the mixture(0.1% if a listed carcinogen) and is not subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical Name | SARA 313 - Threshold Values % |
|---|---|
| Ammonium hydroxide - 1336-21-6 | 1.0 |
| Formaldehyde - 50-00-0 | 0.1 |
| Quinoline - 91-22-5 | 1.0 |
| Naphthalene - 91-20-3 | 0.1 |

#### SARA 311/312 Hazard Categories

| | |
|---|---|
| **Acute health hazard** | No |
| **Chronic Health Hazard** | No |
| **Fire hazard** | No |
| **Sudden release of pressure hazard** | No |
| **Reactive Hazard** | No |

#### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|---|---|---|---|
| Ammonium hydroxide 1336-21-6 | 1000 lb | - | - | X |
| Formaldehyde 50-00-0 | 100 lb | - | - | X |
| Quinoline 91-22-5 | 5000 lb | - | - | X |
| Naphthalene 91-20-3 | 100 lb | X | X | X |

#### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---|---|---|---|
| Ammonium hydroxide 1336-21-6 | 1000 lb | - | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |
| Formaldehyde 50-00-0 | 100 lb | 100 lb | RQ 100 lb final RQ<br>RQ 45.4 kg final RQ |
| Quinoline 91-22-5 | 5000 lb | - | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

| | | | |
|---|---|---|---|
| Naphthalene<br>91-20-3 | 100 lb 1 lb | - | RQ 100 lb final RQ<br>RQ 45.4 kg final RQ RQ 1 lb final RQ<br>RQ 0.454 kg final RQ |

## US State Regulations

### California Proposition 65

This product contains chemicals known to the state of California to cause birth defects or other reproductive harm

| Chemical Name | California Proposition 65 |
|---|---|
| Formaldehyde - 50-00-0 | Carcinogen |
| Quinoline - 91-22-5 | Carcinogen |
| Naphthalene - 91-20-3 | Carcinogen |

### U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Ammonium hydroxide<br>1336-21-6 | X | X | X |
| Formaldehyde<br>50-00-0 | X | X | X |
| Quinoline<br>91-22-5 | X | X | X |
| Naphthalene<br>91-20-3 | X | X | X |

### U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NFPA** | **Health hazards** 1 | **Flammability** 0 | **Instability** 0 | **Physical and Chemical Properties** - |
| **HMIS** | **Health hazards** 1 | **Flammability** 0 | **Physical hazards** 0 | **Personal protection** B |

**Prepared By** Diane M. Hunsicker
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**Revision Note**
SDS sections updated: 1, 14

**Disclaimer**

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**End of Safety Data Sheet**